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Before the Federal Communications Commission

In the Matter of

AMENDMENT OF PARTS 2, 22 & 25 OF THE COMMISSION'S RULES

for an Allocation of Frequencies and Other Rules for a New Nationwide Hybrid Space/Ground Cellular Network for Personal/ Mobile Communications Services

RM-7927 RECEIVED

JUL 2 1 1993

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

### NOTICE TO COUNSEL

This is to advise that on this date the undersigned refiled the Amendment to Petition for Rulemaking for CELSAT, Inc. previously filed in the above-captioned proceeding on July 8, 1993. The sole purpose for the refiling was to conform the Amendment to the Notice of Withdrawal of Confidential Material dated July 19, 1993, by substituting the attached pages 35-40, 50 and the Table of Contents (pages iv and v) for the previously filed corresponding pages, and to delete the blank pages referencing Appendices E and F. There were no other changes.

> Respectfully submitted CELSAT

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July 21, 1993

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This is to certify that a copy of the foregoing Notice to Counsel has been served this date on the parties indicated on the attached service list.

July 21, 1993

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(including some 130 exempt public entities). CELSAT is confident that voluntary negotiations with these users will be economically feasible.

#### b. The 2160-2180 MHz Band Occupants

This band is assigned primarily to Common Carrier, FCC Part 21 services. Licenses typically are assigned as overlapping or contiguous use of 3.5 MHz, 1.6 MHz or 0.8 MHz bandwidth channels. In addition, in fifty major markets MDS channel 2 is assigned at 2156-2162 MHz. This may deny the lower one or two 1.25 MHz subbands in such areas.

In the downlink there is no need for clearing a subband across each satellite cell as for the uplink. It is sufficient that there be some clear frequency everywhere across the cell even if it is different on one side of the cell than on the other. Since necessary exclusion zones are much smaller than space cells, this is a much more lenient condition.

#### B. FUNDAMENTALS OF HPCS INTERFERENCE AVOIDANCE PLAN

CELSAT's plan envisions that ultimately most or all of the present occupants may be relocated from the band. At least initially, however, CELSAT can and will share the subject bands with the present Fixed Microwave occupants on a not-to-interfere and not-to-claim-interference basis.

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# VI. AN HPCS ALLOCATION GUARANTEES THE MOST SPECTRALLY EFFICIENT AND FUNCTIONALLY COMPLETE USE OF THE ET SPACE BAND

#### A. UNPARALLELED SPECTRAL EFFICIENCY

Both internal and external spectral efficiency over both the short and the long terms is important. Internal efficiency i.e., the spectral efficiency of a single system, is a function of system design and technology and has been shown above to be best achieved through HPCS. External efficiency concerns the ability both to provide useful functions and to co-exist in the spectrum with others now and over the full life of the system, such that, the band is fully used -- spatially, functionally, geographically and over time.

#### 1. Several Levels of Sharing Possible

No other proposed spectrum use for mobile purposes can promise the degree of spectral efficiency through sharing attainable through the hybrid system concept. As a result of the recently completed MSS Negotiated Rulemaking process it has been shown that while a high degree of sharing among competing

#### c. Sharing Should be Delayed

CELSAT is confident of the fundamental validity of sharing the space segment of the band with another CDMA HPCS entity. However, in view of the added complexity and unprecedented problems of initial accommodation with the incumbent fixed services, and the prospect for voluntary coordinating negotiations for relocation of many of these incumbents, CELSAT urges that initially there should be only a single licensed entity until such time as the clearing process has achieved a substantial definable level of incumbent clearances and fully compatible operations have been demonstrated with the remainder.

In support of subsequent sharing, the rules should further provide for mandatory negotiated compensation by a subsequent licensee to the primary licensee for its expense and risk incurred in prior band clearing.

#### CONCLUSION

Accordingly, the commission should amend its rules as proposed herein and as set forth in Appendix A attached hereto.

Respectfully submitted

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July 21, 1993

#### CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing Amendment to Petition for Rulemaking has been served this date by U.S. Mail to counsel for the parties

herein, addressed as indicated on the attached list

July 21, 1993